

AMENDMENT

Claims 1-3 and 6 stand rejected under 35 U.S.C. § 103 as being unpatentable over JP '012, and claims 4, 5 and 7 stand rejected under 35 U.S.C. § 102 as being anticipated by JP '012 (cited in IDS filed on October 3, 2003). The rejection under § 102 with respect to claims 4, 5 and 7 has been rendered moot in view of the cancellation of those claims, which was done without prejudice/disclaimer to the subject matter embodied thereby. The rejection under § 103 is respectfully traversed for the following reasons.

Claim 1 recites in pertinent part, "a fourth step to flatten the surface of the insulating film ... wherein the exposed surfaces of the n-type electrode and the p-type electrode are formed on the same flattened surface of the insulating film." Support for this feature can be found, for example, on page 11, lines 4-18 of Applicants' specification. According to one aspect of the present invention, such an arrangement can prevent incomplete adhesion when the n-type electrode and the p-type electrode are adhered to wires of a sub-mount by using heat-melted solder structures, so that yield of the product can be increased.

In contrast, the top surfaces of the alleged n,p-type electrodes 140, 120 of JP '012, respectively, do NOT reach the upper surface of the alleged insulating film 230. Instead, JP '012 uses a separate metal post 220 to externally connect the n,p-type electrodes. Indeed, the surface of the alleged insulating film 230 has a wavelike configuration, and JP '012 is completely silent as to a step of flattening the surface of the alleged insulating film 230. Accordingly, the alleged insulating film 230 of JP '012 is not flat as expressly shown in the drawings. Needless to say, regardless of drawing dimensions, the alleged insulating film is certainly NOT inherently flat (i.e., MUST be flat) as would be required to maintain the pending rejection), so that the exposed surfaces of the n-type electrode and the p-type electrode, even assuming *arguendo* they reached

the upper surface of the alleged insulating film 230, would still not be formed on the same flattened surface of the alleged insulating film 230.

The Examiner is directed to MPEP § 2143.03 under the section entitled "All Claim Limitations Must Be Taught or Suggested", which sets forth the applicable standard for establishing obviousness under § 103:

To establish *prima facie* obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art. (citing *In re Royka*, 180 USPQ 580 (CCPA 1974)).

In the instant case, the pending rejection does not "establish *prima facie* obviousness of [the] claimed invention" as recited in claim 1 because the proposed combination fails the "all the claim limitations" standard required under § 103.

Under Federal Circuit guidelines, a dependent claim is nonobvious if the independent claim upon which it depends is allowable because all the limitations of the independent claim are contained in the dependent claims, *Hartness International Inc. v. Simplimatic Engineering Co.*, 819 F.2d at 1100, 1108 (Fed. Cir. 1987). Accordingly, as claim 1 is patentable for the reasons set forth above, it is respectfully submitted that all claims dependent thereon are also patentable. In addition, it is respectfully submitted that the dependent claims are patentable based on their own merits by adding novel and non-obvious features to the combination.

For example, claim 2 recites in pertinent part, "a sixth step, following the fifth step, to press-fit the surface of the insulating film to a sub-mount containing a first wire and a second wire ... and electrically connect the n-type electrode and the p-type electrode to the first wire and the second wire, respectively." According to an aspect of the present invention, such an arrangement can achieve an excellent connection of the n-type electrode and the p-type electrode to the sub-mount.

Based on the foregoing, it is respectfully submitted that all pending claims are patentable over the cited prior art. Accordingly, it is respectfully requested that the rejection under 35 U.S.C. § 103 be withdrawn.

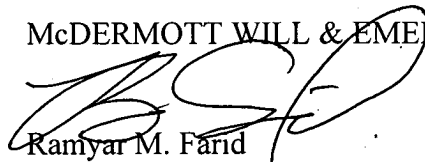
CONCLUSION

Having fully responded to all matters raised in the Office Action, Applicants submit that all claims are in condition for allowance, an indication for which is respectfully solicited. If there are any outstanding issues that might be resolved by an interview or an Examiner's amendment, the Examiner is requested to call Applicants' attorney at the telephone number shown below.

To the extent necessary, a petition for an extension of time under 37 C.F.R. 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account 500417 and please credit any excess fees to such deposit account.

Respectfully submitted,

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